# **Oxfordshire** Strategic rail freight interchange

Preliminary Environmental Information (Work in Progress) Report (PEIR)

**Draft Environmental Statement** 

Chapter 7: Landscape and Visual Assessment

On behalf of Oxfordshire Railfreight Limited

Prepared by FPCR Revision D April 2022



# CONTENTS

- 7.1 INTRODUCTION
- 7.2 ASSESSMENT SCOPE AND METHODOLOGY
- 7.3 POLICY CONTEXT
- 7.4 BASELINE CONDITIONS
- 7.5 ASSESSMENT OF LIKELY EFFECTS
- 7.6 MITIGATION AND RESIDUAL EFFECTS
- 7.7 CUMULATIVE EFFECTS
- 7.8 SUMMARY AND CONCLUSIONS

## **FIGURES**

- Figure 7.1: Aerial Photograph
- Figure 7.2: Environmental Designations and Features
- Figure.7.3: Landscape Character
- Figure 7.4: Topography
- Figure 7.5: Photo Viewpoint Locations (Provisional)
- Figure 7.6: Photo Viewpoints

## APPENDICES

- APPENDIX 7.1: LVIA Methodology and Assessment Criteria
- APPENDIX 7.2: Arboricultural Assessment (Draft)



# 7.1 INTRODUCTION

- 7.1.1 This draft chapter of the ES assesses the likely significant environmental effects of the Proposed Development in respect of landscape and visual matters. In particular, this chapter describes the relevant legislation and landscape and visual policy context; the methods used for assessment and details of the criteria used to determine significance; the baseline landscape and visual conditions at and surrounding the Application Site; and the nature of the potential impacts and effects that are likely to arise as a result of the Proposed Development. It also considers and outlines the nature of any mitigation or control measures to be included to reduce or eliminate adverse effects.
- 7.1.2 At this stage, the draft chapter does not include an assessment of the level of effects of the Proposed Development on the identified landscape and visual receptors or full details of the landscape design and mitigation measures to be incorporated as part of the scheme. It also does not include an assessment of the residual and cumulative effects of the Proposed Development on the landscape and visual receptors.
- 7.1.3 This chapter is accompanied by a series of Figures and Appendices as follows:

## Figures

- Figure 7.1: Aerial Photograph
- Figure 7.2: Environmental Designations and Features
- Figure.7.3: Landscape Character
- Figure 7.4: Topography
- Figure 7.5: Photo Viewpoint Locations (Provisional)
- Figure 7.6: Photo Viewpoints

## Appendices

- Appendix 7.1: Landscape and Visual Impact Assessment (LVIA) Criteria
- Appendix 7.2: Arboricultural Assessment (Draft)

# Competency

- 7.1.4 The Landscape and Visual Impact Assessment (LVIA) and this ES Chapter have been prepared by FPCR Environment and Design Ltd (FPCR).
- 7.1.5 In accordance with the Environmental Impact Assessment (EIA) Regulations (2017) the LVIA and ES chapter have been carried out by competent experts, comprising Chartered Members of the Landscape Institute, and is in accordance with guidance of the professional institution, the 'Guidelines for Landscape and Visual Impact Assessment', third edition (GLVIA3), published by the Landscape Institute and the Institute of Environmental Management and Assessment, in 2013.
- 7.1.6 FPCR is a multi-disciplinary environmental and design consultancy established over 60 years, with expertise in architecture, landscape, ecology, arboriculture, urban



design, masterplanning and environmental impact assessment. The practice is a member of the Landscape Institute and Institute of Environmental Management and Assessment and are frequently called upon to provide expert evidence on landscape and visual issues at Public and Local Plan Inquiries.

## 7.2 ASSESSMENT SCOPE AND METHODOLOGY

- 7.2.1 This LVIA has been prepared based upon the Guidelines for Landscape and Visual Impact Assessment, third edition (GLVIA3), published by the Landscape Institute and the Institute of Environmental Management and Assessment, in 2013. The assessment of Landscape Value also takes account of guidance in Landscape Institute Technical Guidance Note 02-21 "Assessing landscape value outside national designations".
- 7.2.2 In summary, the GLVIA3 states:

"Landscape and Visual impact assessment (LVIA), is a tool used to identify and assess the significance of and the effects of change resulting from development on both landscape as an environmental resource in its own right and on people's views and visual amenity." (GLVIA3 paragraph 1.1.)

- 7.2.3 There are two components of LVIA:
  - *"Assessment of landscape effects; assessing effects on the landscape as a resource in its own right;*
  - Assessment of visual effects: assessing effects on specific views and on the general visual amenity experienced by people." (GLVIA3 paragraph 2.21.)
- 7.2.4 The components of this report include baseline studies; description and details of the landscape proposals and mitigation measures to be adopted as part of the scheme; identification and description of likely effects arising from the proposed development; and an assessment of the significance of these effects.
- 7.2.5 In terms of baseline studies, the assessment provides an understanding of the landscape that may be affected, its constituent elements, character, condition and value. For the visual baseline this includes an understanding of the area in which the development may be visible, the people who may experience views, and the nature of views.

## Assessment of Landscape Effects

- 7.2.6 GLVIA3 states that "An assessment of landscape effects deals with the effects of change and development on landscape as a resource" (GLVIA3 paragraph 5.1).
- 7.2.7 The baseline landscape is described by reference to existing published Landscape Character Assessments and by a description of the Application Site and its context.



- 7.2.8 A range of landscape effects can arise through development. These can include:
  - Change or loss of elements, features, aesthetic or perceptual aspects that contribute to the character and distinctiveness of the landscape;
  - Addition of new elements that influence character and distinctiveness of the landscape;
  - Combined effects of these changes.
- 7.2.9 The characteristics of the existing landscape resource are considered in respect of the susceptibility of the landscape resource to the change arising from this development. The value of the existing landscape is also considered.
- 7.2.10 Each effect on landscape receptors is assessed in terms of size or scale, the geographical extent of the area influenced and its duration and reversibility. In terms of size or scale of change, the judgement takes account of the extent of the existing landscape elements that will be lost or changed, and the degree to which the aesthetic or perceptual aspects or key characteristics of the landscape will be altered by removal or addition of new elements. Geographical extent is considered by reference to the extent of the area over which there will be a change. Duration is considered for the landscape effects, with short term effects being defined as those lasting less than 5 years, medium term effects lasting between 5 and 10 years and long-term effects being defined as anything over 10 years in duration.
- 7.2.11 The level of effect is determined by considering the sensitivity of the landscape receptors and the magnitude of effect on the landscape. Final conclusions on the overall landscape effects are drawn from the assessment components described. This assessment describes the nature of the landscape effects, and whether these are adverse or beneficial, at the following stages of development; construction, completion (year 1) and longer term (year 15).
- 7.2.12 The criteria used in the assessment are set out in Appendix 7.1.

## **Assessment of Visual Effects**

- 7.2.13 An assessment of visual effects deals with the effects of change and development on the views available to people and their visual amenity. This assessment describes the nature of the visual effects and, whether these are adverse or beneficial, at the following stages of development; construction, completion (year 1 winter) and longer term (year 15 summer).
- 7.2.14 The first stage in the assessment is to identify approximate visibility/ visibility mapping. This is done by either a computerised Zone of Theoretical Visibility (ZTV), or by manual methods using map study and field evaluation. A series of viewpoints are included within the assessment that are representative of views towards the Site from surrounding visual receptors. Other views of the Site are included where it supports the description and understanding of the Site's landscape and visual characteristics.



- 7.2.15 The views also typically represent what can be seen from a variety of distances from the development and different viewing experiences.
- 7.2.16 It is important to remember that visual receptors are all people. For each affected viewpoint, the assessment considers both the susceptibility to change in views and the value attached to views.

"The visual receptors most susceptible to change are generally likely to include:

- Residents at home;
- People, whether residents or visitors, who are engaged in outdoor recreation, including use of public rights of way, whose attention or interest is likely to be focused on the landscape or particular views;
- Visitors to heritage assets or to other attractions, where views of the surroundings are an important contributor to the experience;
- Communities where views contribute to the landscape setting enjoyed by residents in the area;
- Travellers on road, rail or other transport routes tend to fall into an intermediate category of moderate susceptibility to change. Where travel involves recognised scenic routes awareness of views is likely to be particularly high." (GLVIA3 paragraph 6.33.)

"Visual receptors likely to be less sensitive to change include:

- People engaged in outdoor sport or recreation which does not involve or depend upon appreciation of views of the landscape;
- People at their place of work whose attention may be focused on their work or activity, not on their surroundings, and where the setting is not important to the quality of working life(although there may be on occasion be cases where views are an important contributor to the setting and to the quality of working life." (GLVIA3 paragraph 6.34.)
- 7.2.17 Each of the visual effects is evaluated in terms of its size or scale, the geographical extent of the area influenced and its duration or reversibility.
- 7.2.18 In terms of size or scale, the magnitude of visual effects takes account of:
  - The scale of the change in the view with respect to the loss or addition of features in the view and changes in its composition, including proportion of the view occupied by the proposed development;
  - The degree of contrast or integration of any new features or changes in the landscape with the existing or remaining landscape elements and characteristics in terms of form, scale and mass, line height, colour and texture;
  - The nature of the view of the proposed development, in terms of the relative amount of time over which it will be experienced and whether views will be full, partial or glimpses. (GLVIA3 paragraph 6.39)



- 7.2.19 The geographical extent of the visual effect in each viewpoint is likely to reflect:
  - The angle of view in relation to the main activity of the receptor;
  - The distance of the viewpoint from the proposed development;
  - The extent of the area over which the changes would be visible.
- 7.2.20 As with landscape effects, the duration of the effect could be short to long term or permanent and the same definitions apply. The criteria used in this assessment are set out in Appendix 7.1.

## **Overall Landscape and Visual Effects**

- 7.2.21 The final conclusions on effects, whether adverse or beneficial, are drawn from the separate judgements on the sensitivity of the receptors and the magnitude of the effects. This overall judgement is formed from a reasoned professional overview of the individual judgements against the assessment criteria.
- 7.2.22 GLVIA3 notes, at paragraphs 5.56 and 6.44, that there are no hard and fast rules with regard to the level of effects, therefore the following descriptive thresholds have been used for this appraisal:
  - Major;
  - Moderate;
  - Minor;
  - Negligible.
- 7.2.23 Where it is determined that the assessment falls between or encompasses two of the defined criteria terms, then the judgement may be described as, for example, Major/ Moderate or Moderate/ Minor. This indicates that the effect is assessed to lie between the respective definitions or to encompass aspects of both.

## Significance Criteria

## Significance of Landscape Effects

7.2.24 In terms of what constitutes a significant landscape effect, GLVIA3 makes it clear at paragraph 5.56 that:

"There are no hard and fast rules about what makes a significant effect, and there cannot be a standard approach since circumstances vary with the location and context and with the type of proposal. At opposite ends of the spectrum it is reasonable to say that:

 Major loss or irreversible negative effects, over an extensive area, on elements and/ or aesthetic and perceptual aspects that are key to the character of nationally valued landscapes are likely to be of the greatest significance;



- Reversible negative effects of short duration, over a restricted area, on elements and/ or aesthetic and perceptual aspects that contribute to but are not key characteristics of the character of landscapes of community value are likely to be of the least significance and may, depending on the circumstances, be judged as not significant;
- Where assessments of significance place landscape effects between these extremes, judgements must be made about whether or not they are significant, with full explanations of why these conclusions have been reached." (GLVIA3 paragraph 5.56.)

## Significance of Visual Effects

7.2.25 In relation to what constitutes a significant visual effect, GLVIA3 states at paragraph 6.44 that:

"There are no hard and fast rules about what makes a significant effect, and there cannot be a standard approach since circumstances vary with the location and context and with the type of proposal. In making a judgement about the significance of visual effects the following points should be noted:

- Effects on people who are particularly sensitive to changes in views and visual amenity are more likely to be significant;
- Effects on people at recognised and important viewpoints or from recognised scenic routes are more likely to be significant;
- 7.2.26 Large-scale changes which introduce new, non-characteristic or discordant or intrusive elements into the view are more likely to be significant than small changes or changes involving features already present within the view." (GLVIA3 paragraph 6.44.)

#### Likely Significant Effects

- 7.2.27 In accordance with the approach advocated in GLVIA3, the categories of Effects considered to represent a '*likely significant effect*' for this LVIA are those effects stated as Major or Moderate/ Major. Where this occurs, this is identified within the LVIA.
- 7.2.28 It should be noted and recognised that there may also be some changes resulting from the Proposed Development that will be significant in their nature and extent yet may encapsulate both adverse and beneficial change. In some of these instances, the resultant effect may not be Major or Moderate/ Major or stated as Significant, due to the combined effect of the adverse and beneficial aspects of the change.

## **Assumptions and Limitations**

7.2.29 The following assumptions are relevant to this Chapter:



- The Residual Landscape and Visual Effects of the Proposed Development take into account the growth of the proposed planting and in particular the proposed woodland and tree planting. Typical growth rates for this planting are drawn from published sources and assumes that the proposed woodland and trees will be circa 8 10 metres high after 15 years.
- 7.2.30 The following limitations are relevant to this Chapter:
  - Judgements on the likely visual effects for any 'private' receptors e.g. residential properties have been determined based upon publicly accessible positions. For example, in some situations it has not been possible to determine the detailed nature of some private views from residential properties, although the likely nature of the view has been appraised based upon a combination of views back towards the property from within the Application Site and from nearby publicly accessible locations.
  - The assessment focuses on the Parameters Plan and on the overall scale and type of use proposed. At this stage, the detail of site layout is not fixed or proposed.

# 7.3 POLICY CONTEXT

# **National Policy Context**

National Policy Statement for National Networks (NPS)

7.3.1 In the context of 'Criteria for "Good Design", the NPS states at paragraph 4.34:

'Whilst the applicant may only have limited choice in the physical appearance of some national networks infrastructure, there may be opportunities for the applicant to demonstrate good design in terms of siting and design measures relative to existing landscape and historical character and function, landscape permeability, landform and vegetation.'

- 7.3.2 All of these landscape related aspects and considerations have been taken into account in the design of the Proposed Development.
- 7.3.3 Chapter 5 of the NPS considers landscape and visual impacts and land use, including open space, green infrastructure and Green Belt. In the context of landscape and visual impacts, the NPS advises that where the development is subject to EIA the applicant should undertake an assessment of any likely significant landscape and visual impacts in the environmental impact assessment and describe these in the environmental assessment. The assessment should include reference to any landscape character assessment and associated studies, as a means of assessing landscape impacts relevant to the proposed project.
- 7.3.4 It further advises that the assessment should include any significant effects during construction of the project and/or the significant effects of the completed development



and its operation on landscape components and landscape character (including historic landscape characterisation). It should also assess the visibility and conspicuousness of the project during construction and of the presence and operation of the project and potential impacts on views and visual amenity.

- 7.3.5 In the context of nationally designated landscape, that includes National Parks and Areas of Outstanding Natural Beauty, the NPS makes reference to '*Developments proposed within nationally designated areas*' at paragraphs 5.150 5.153. The Site is not located within a nationally designated area.
- 7.3.6 At paragraphs 5.154 5.155, the NPS makes reference to '*Developments outside nationally designated areas which might affect them*'. The Site is not located close to or within the setting of a nationally designated area and the Proposed Development will not affect a nationally designated area.
- 7.3.7 Under the heading 'Visual Impact' at paragraph 5.158, the NPS states:

'The Secretary of State will have to judge whether the visual effects on sensitive receptors, such as local residents, and other receptors, such as visitors to the local area, outweigh the benefits of the development...'

- 7.3.8 This assessment has considered the potential and likely effects of the Proposed Development on sensitive visual receptors to date, and this process will continue as the assessment and design progresses.
- 7.3.9 Under the heading 'Mitigation' at paragraph 5.160, the NPS states:

'Adverse landscape and visual effects may be minimised through appropriate siting of infrastructure, design (including choice of materials), and landscaping schemes, depending on the size and type of proposed project. Materials and designs for infrastructure should always be given careful consideration.'

- 7.3.10 The design 'parameters' (as detailed on the Parameters Plan) of the Proposed Development and the integral and other mitigation measures and landscape proposals have been considered and appraised as part of an iterative and ongoing process to enable the potential landscape and visual effects to be mitigated and minimised.
- 7.3.11 Other related matters are referenced under the section on '*Land use including open space, green infrastructure and Green Belt*'. This includes reference to the effects upon Green Infrastructure and Public Rights of Way. The Application Site lies outside Green Belt.
- 7.3.12 All of the landscape and visual matters raised in the NPS have been considered and appraised as part of the design and subsequent assessment of the Proposed Development to date. This will continue to be the case as the Proposed Development is further appraised and the scheme design and parameters are refined.



## National Planning Policy Framework (NPPF)

- 7.3.13 Of relevance to this LVIA, the Natural Environment section of the NPPF provides a policy context for the countryside and green infrastructure. The key objectives under this heading include protecting and enhancing valued landscapes and, minimising impacts on and providing net gains for biodiversity.
- 7.3.14 Paragraph 174 states at part a) that planning policies and decisions should protect and enhance valued landscapes and goes on to clarify that this should be in a manner commensurate with their statutory status or identified quality in the development plan. Part b) states that planning policies and decisions should recognise *"the intrinsic character and beauty of the countryside"*.
- 7.3.15 The Application Site is within an undesignated landscape with no special protected status and is outside of the Green Belt. The character of the Application Site and its immediate context is assessed within this chapter and has helped to inform decisions regarding *"the intrinsic character and beauty of the countryside"* and the design and layout of the Proposed Development. The potential to enhance green infrastructure networks is also considered.
- 7.3.16 The landscape and green infrastructure parameters and proposals which form part of the Proposed Development stem from the landscape and visual assessments undertaken to date and any necessary mitigation measures identified, reflect the principles of Good Design which the NPPF advocates.

## National Planning Practice Guidance (PPG)

7.3.17 The PPG supports the use of landscape character assessment as a tool for understanding local distinctiveness and Natural England's guidance on landscape character assessment. It also provides a wide range of guidance on environmental and design matters. This has been considered as part of the design and assessment process.

## Local Policy Context

## Cherwell Local Plan 2011-2031

7.3.18 The following policies are relevant to landscape and visual matters;

## "Policy ESD 13: Local Landscape Protection and Enhancement

Opportunities will be sought to secure the enhancement of the character and appearance of the landscape, particularly in urban fringe locations, through the restoration, management or enhancement of existing landscapes, features, or habitats and where appropriate the creation of new ones, including the planting of woodlands, trees and hedgerows.



Development will be expected to respect and enhance local landscape character, securing appropriate mitigation where damage to local landscape character cannot be avoided. Proposals will not be permitted if they would:

- Cause undue visual intrusion into the open countryside
- Cause undue harm to important natural landscape features and topography
- Be inconsistent with local character
- Impact on areas judged to have a high level of tranquillity
- Harm the setting of settlements, buildings, structures, or other landmark features, or
- Harm the historic value of the landscape.

Development proposals should have regard to the information and advice contained in the Council's Countryside Design Summary Supplementary Planning Guidance, and the Oxfordshire Wildlife and Landscape Study (OWLS) and be accompanied by a landscape assessment where appropriate."

7.3.19 The Local Plan confirms that the previously identified Areas of High Landscape Value (in the previous 1996 Local Plan) are not proposed or defined and the policy adopts a character based landscape approach drawing primarily upon the Oxfordshire Wildlife and Landscape Study (OWLS).

## "Policy ESD 17: Green Infrastructure

The District's green infrastructure network will be maintained and enhanced through the following measures:

- Pursuing opportunities for joint working to maintain and improve the green infrastructure network, whilst protecting sites of importance for nature conservation
- Protecting and enhancing existing sites and features forming part of the green infrastructure network and improving sustainable connectivity between sites in accordance with policies on supporting a modal shift in transport (Policy SLE4:Improved Transport and Connections)....etc,
- Ensuring that green infrastructure network considerations are integral to the planning of new development. Proposals should maximise the opportunity to maintain and extend green infrastructure links to form a multi-functional network of open space, providing opportunities for walking and cycling, and connecting the towns to the urban fringe and the wider countryside beyond
- All strategic development sites (Section C: 'Policies for Cherwell's Places') will be required to incorporate green infrastructure provision and proposals should include details for future management and maintenance."
- 7.3.20 These policies and the other reference documents both within the policies and the supporting text have been appraised in the assessment and design process to date and will continue to be considered in the ongoing assessment and design process.



## Mid-Cherwell Neighbourhood Plan (Made May 2019)

- 7.3.21 The Neighbourhood Plan includes the following policies with relevance to landscape and visual matters;
  - Policy PD4: Protection of Important Views and Vistas
- 7.3.22 This policy requires development proposals to demonstrate sensitivity to the important views and vistas described in the Plan (at Table 4) and to be 'designed such that there is no adverse impact on the sensitive skylines' as identified in the Plan (at Table 4 and Figure 8).
- 7.3.23 Figure 8 of the Neighbourhood Plan identifies two 'Protected Skylines' within the Plan area and a series of church towers. The two 'Protected Skylines' stretch along the highest valley slopes to either side of the River Cherwell, in broadly north south directions to either side of the river. The nearest one to the Application Site lies on the eastern side of the River Cherwell and stretches through the higher ground within the western part of the former airfield. This is shown stretching through the north western part of former airfield at 139m AOD and continues northwards beyond Fritwell to 142m AOD. To the west of the River Cherwell the 'Protected Skyline' rises to over 155m AOD.
- 7.3.24 The two '*Protected Skylines*' do not include land within the Application Site.
- 7.3.25 The church towers identified on Figure 8 of the Neighbourhood Plan include churches at Ardley, Middleton Stoney and Fritwell, along with six further church towers within or to the west of the River Cherwell valley.

# Other Relevant Policy, Standards and Guidance

## National Design Guide (September 2019)

- 7.3.26 The design principles and 'parameters' of the Proposed Development has been considered in landscape and visual terms against the Government's National Design Guide and the ten characteristics detailed within the Guide. This process will continue as the Proposed Development is further assessed and the proposals are progressed and refined.
- 7.3.27 Further relevant policies, standards and guidance will be drawn upon and considered as relevant to landscape and visual matters.

## 7.4 BASELINE CONDITIONS

7.4.1 This section summarises the characteristics of the existing landscape and visual conditions of the Application Site and the surrounding area. It aims to outline the features and characteristics that make the landscape distinctive and important. An



Aerial Photograph is included at Figure 7.1 and the location and extent of the different defined Landscape Character Areas are detailed at Figure 7.3.

## Landscape Character

7.4.2 Landscape Character Assessments and related studies have been prepared at National, County and District wide scales covering the Application Site and its context.

## National Character

- 7.4.3 National Character Area (NCA) profiles have been prepared by Natural England for the 159 NCAs defined across England. These NCA profiles include a description of the natural and cultural features that shape the landscape, how the landscape has changed over time, the current key drivers for ongoing change, and a broad analysis of each area's characteristics.
- 7.4.4 The Application Site lies within the eastern part of the Cotswolds NCA (107). This NCA covers a very extensive landscape tract stretching from Bath in the south west to Brackley and Bicester in the north east. The majority of the NCA lies within the Cotswolds Area of Outstanding Natural Beauty (AONB). The Application Site lies outside and some distance beyond the AONB and within proximity to other NCAs at a broader context scale. In this regard, the Cotswold NCA (107) provides a very broad contextual reference for the Application Site.
- 7.4.5 Key characteristics of the Cotswolds NCA (107) include the following:
  - "Defined by its underlying geology.... The limestone geology has formed the scarp and dip slope of the landscape, which in turn has influenced drainage, soils, vegetation, land use and settlement.
  - Arable farming dominates the high wold and dip slope while permanent pasture prevails on the steep slopes of the scarp and river valleys with pockets of internationally important limestone grassland.
  - Drystone walls define the pattern of fields of the high wold and dip slope. On the deeper soils and river valleys, hedgerows form the main field boundaries.
  - Ancient beech hangers line stretches of the upper slopes of the scarp, while oak/ash woodlands are characteristic of the river valleys. Regular blocks of coniferous and mixed plantations are scattered across the open high wold and dip slope.
- 7.4.6 The other NCA's located within the broader context of the Application Site include the Upper Clay Thames Vales (108) to the south east; the Bedfordshire and Cambridgeshire Claylands (88); and the Northamptonshire Uplands (95).



## County Context

## Oxfordshire Wildlife and Landscape Study (OWLS)

- 7.4.7 OWLS is the current landscape character assessment for Oxfordshire and the project advises that it should be used in conjunction with landscape character assessments available at a district level. The OWLS assessment includes twenty four separate landscape types within the county, made up of individual landscape description units with a similar pattern of geology, topography, land use and settlements.
- 7.4.8 The Application Site includes land within two of these Landscape Types, namely the *Wooded Estatelands* and the *Farmland Plateau* (Figure 7.3). The south eastern part of the Main Site and the land beyond to the east and south east stretching up to the edge of Bicester lies within the *Wooded Estatelands* Landscape Type. The land in the north of the Application Site, around and to the north of Junction 10 also lies within the *Wooded Estatelands* Landscape Type. The land in the Moin Site and the land beyond to the west and north western part of the Main Site and the land beyond to the west and north west (including Heyford Park/ Airfield) lie within the *Farmland Plateau* Landscape Type. The land immediately to the east of Ardley and including the site of the proposed Ardley Bypass also lies within the *Farmland Plateau* Landscape Type.

## Wooded Estatelands Landscape Type

- 7.4.9 Key Characteristics of this Landscape Type comprise;
  - "Rolling topography with localised steep slopes.
  - Large blocks of ancient woodland and mixed plantations of variable sizes.
  - Large parklands and mansion houses.
  - A regularly-shaped field pattern dominated by arable fields.
  - Small villages with strong vernacular character."
- 7.4.10 A series of Local Character Areas are identified within this Landscape Type.
- 7.4.11 The Application Site includes land within that identified as '*Middleton Stoney* (*CW*/59)'. The Landscape Character for this Local Character Area is described in the study as follows;

"The area is dominated by large arable fields and localised improved grassland. There are smaller grass fields around villages, particularly Bletchington and Kirtlington. Woodland is a strong landscape element, and large woodland blocks are associated with the parklands and estates. It is mainly ancient semi-natural woodland, with species such as ash, oak, hazel, and field maple, as well as mixed plantations. Throughout the landscape, there are belts of young mixed and coniferous plantations next to roadside hedges and they often function as field boundaries. Hedgerow trees such as ash, sycamore and occasionally oak are found in some roadside hedges, but they are sparser to the north where there is more intensive arable cropping. In parts there are dense corridors of willow and ash, belts of seminatural woodland and poplar plantations bordering watercourses. Hedgerows vary



from tall, thick species-rich hedges with shrubs such as wayfaring tree, dogwood, hazel, field maple, spindle and wild privet through to low, gappy internal field hedges. Parklands are a prominent feature throughout and they include Middleton, Bignell and Tusmore Parks in the north and Kirtlington and Bletchington Parks in the south."

- 7.4.12 Under the heading '*Forces for Change*' for the *Wooded Estatelands* Landscape Type, the study includes the following references;
  - "The vernacular character is strong in most of the villages and there is generally a low impact from residential development, especially within the wider countryside... There is also sprawling development along some of the main roads, particularly the A420 and A338, although this is mitigated to some extent by woodland and mature garden trees.
  - In very intensive areas of arable farming some of the new, large-scale barn complexes are visually intrusive.
  - Some large-scale business parks using inappropriate building materials are also visually intrusive.
  - There is a localised visual impact from operational quarries and partially restored landfill sites, particularly around places such as Stanford-in-the-Vale.
  - Overhead pylons are very intrusive in the more open areas where intensive arable farming predominates"
- 7.4.13 The Landscape Strategy Guidelines for the *Wooded Estatelands* Landscape Type includes the following;
  - "Conserve and maintain semi-natural and ancient semi-natural woodland. Where appropriate, replace non-native conifer species with native species such as oak and ash. Promote the establishment and management of medium to large-scale deciduous and mixed plantations in areas where the landscape structure is particularly weak.
  - Conserve the surviving areas of permanent pasture and promote arable reversion to grassland, particularly within parklands.
  - Minimise the visual impact of intrusive land uses such as quarries, landfill sites, airfields and large-scale development, such as new barns and industrial units, with the judicious planting of tree and shrub species characteristic of the area. This will help to screen the development and integrate it more successfully with its surrounding countryside."

# Farmland Plateau Landscape Type

- 7.4.14 Key Characteristics of this Landscape Type comprise;
  - "Level or gently rolling open ridges dissected by narrow valleys and broader vales.
  - Large, regular arable fields enclosed by low thorn hedges and limestone walls.
  - Rectilinear plantations and shelterbelts.
  - Sparsely settled landscape with a few nucleated settlements.



- Long, straight roads running along the ridge summits."
- 7.4.15 A series of local character areas are identified within this Landscape Type.
- 7.4.16 The Application Site includes land within that identified as '*H. Fritwell (CW/57)*'. The Landscape Character for this Local Character Area is described in the study as follows;

"This area is characterised by large, regularly-shaped arable fields and medium-sized mixed plantations. There are small fields of semi-improved grassland surrounding villages. There are also a few large blocks of ancient semi-natural woodland, including Stoke Wood and Stoke Little Wood, which add to the wooded character of the area. The field boundaries are dominated by hawthorn and blackthorn hedges with scattered hedgerow trees, although the latter are almost totally absent to the south of Upper Heyford airfield. Hedges are generally low in height, except around Fritwell and Ardley where they are taller and more species-rich."

- 7.4.17 Under the heading '*Forces for Change*' for the *Farmland Plateau* Landscape Type, the study includes the following;
  - "Agricultural intensification, particularly the conversion of grassland to arable has resulted in the loss of semi-natural vegetation and fragmentation of the hedgerow network
  - The open plateau landscapes are very exposed and agricultural buildings and other large structures, such as the industrial units at Enstone Airfield, are particularly prominent. Similarly, the structures associated with Upper Heyford airfield are very visible across the Cherwell valley."
- 7.4.18 The Landscape Strategy Guidelines for the *Farmland Plateau* Landscape Type includes the following references;
  - "Conserve the open, spacious character of the landscape by limiting woodland planting on the more exposed ridge tops. Locate new planting in the dips and folds of the landscape and establish tree belts around airfields, quarries and other large structures to reduce their visual impact using locally characteristic native tree and shrub species such as ash, oak and beech.
  - Conserve all remaining areas of semi-improved and unimproved grassland and encourage conversion of arable to pasture.
  - Maintain the sparsely settled rural character of the landscape by concentrating new development in and around existing settlements. The exposed character of the plateau is particularly sensitive to visually intrusive development, large buildings and communication masts."

## Oxfordshire Historic Landscape Characterisation (HLC) Project

7.4.19 The Oxfordshire HLC Project was completed in 2017. The aims of the Project were to characterise, digitally map and make available in a web-based format, the historic



dimension of the current landscape of Oxfordshire, in order to inform its management, conservation, and understanding at a local, county, regional, and national level. It is a detailed and comprehensive evidence base and reference has been made to the document and the interactive map during the assessment and design process.

## **District/ Borough Context**

## Cherwell District Landscape Assessment (1995)

7.4.20 This district scale landscape study is relatively dated now yet does form part of the suite of relevant landscape character assessment studies. It provides an assessment of the landscape at a district wide scale. Within this study, the Application Site comprises land predominantly within the Oxfordshire Estate Farmlands Landscape Character Area yet also on the edge of the Upper Heyford Plateau Landscape Character Area, which lies to the west and includes the former airfield.

## Published Landscape Character Assessments – Summary

7.4.21 It is evident from the published Landscape Character Assessment studies that the Application Site and its context lie within a relatively varied landscape, on the boundary of two different landscape types at a county wide scale

## Other Published Landscape Studies

Mid-Cherwell Heritage and Character Assessment (AECOM; April 2017)

- 7.4.22 This study provides a summary of the history and character of the Mid- Cherwell Neighbourhood Area and was prepared by consultants working with the Mid-Cherwell Neighbourhood Plan Group. It formed part of the evidence base for the Neighbourhood Plan and is include as an Appendix to this Plan. This study has been reviewed as part of the assessment and design process to date.
- 7.4.23 Appendix C to this study identifies Local Viewpoints. These are predominantly located within the western half of the Plan area and concentrated along the River Cherwell valley and the land to the west of the valley. A single Local Viewpoint is identified within the eastern half of the Plan area and that is located at the B4030 road bridge crossing of the M40 motorway. This view is replicated at Photo Viewpoint 31, at Figure 7.6 of this Chapter.
- 7.4.24 No other Local Viewpoints are identified within the context of the Application Site, and this includes no identified Local Viewpoints within the Application Site or at Ardley, Middleton Stoney, Fritwell or the former airfield and Heyford Park.

## Other Published Landscape Studies

7.4.25 A series of other studies and documents relating to the Upper Heyford former airfield have been published largely by Cherwell District Council. These generally focus on the heritage aspects of the former airfield yet do also include matters relevant to landscape character and other landscape and visual issues. These background



documents have been consulted and reviewed as part of the baseline and assessment work to date. The studies include the following;

- Former RAF Upper Heyford Landscape Capacity and Sensitivity Assessment (2014)
- Former RAF Upper Heyford Conservation Area Appraisal (2006)
- Former RAF Upper Heyford Landscape Character Assessment of the Airbase South of the Cold War Zone (2006)

# Designations

## Designated Landscapes

- 7.4.26 The Application Site and the landscape within its context is not covered by any landscape quality designations at either a national or local level e.g. National Parks, AONB's, Special Landscape Areas etc.
- 7.4.27 Figure 7.2 details other environmental designations and features within the Application Site and its context. These include a number of heritage and ecological designations as considered within other Chapters.

## Registered Parks and Gardens

7.4.28 Middleton Park to the south west of the Main Site (approximately 600 – 750m) is a registered Park and Garden (Grade II). It comprises a circa 330ha park that is visually well enclosed and contained by mature tree belts and woodland and the land within the Park generally falls towards the south and west. The Park includes a number of Listed Buildings and the main House is Grade I listed. The park is privately owned. Further details on the park and the listed buildings are included within the Heritage Chapter.

## Topography

7.4.29 The following should be read in conjunction with Figure 7.4.

## Context – Landform

- 7.4.30 The topography of the Application Site's context is shaped by the River Cherwell valley to the west and the gentler rolling slopes and smaller subsidiary valleys that fall to the east of the Cherwell Valley. The River Cherwell lies approximately 2.5 3.0 km to the west of the Application Site and falls from north to south, with the river along this stretch situated at typically 75- 80 metres Above Ordnance Datum (AOD).
- 7.4.31 The more immediate context of the Main Site includes relatively higher ground to the west and north. Upper Heyford Former Airfield comprises land above 130m AOD, with the former runway at up to around 133m AOD and relatively higher ground in the north of the airfield. The central and southern parts of the former airfield include land typically around 120 130m AOD. To the north of the Main Site, the land gently rises



to over 140m AOD between Fritwell and Souldern, approximately 2.5 - 3.0km away. From this relatively higher ground to the north and west the land generally slopes towards the south east, through the Main Site and Bicester to the south east. A series of minor watercourses and shallow ridgelines create some variation to the landform across this broader context.

- 7.4.32 To the north of the Main Site, Ardley lies at around 115 120m AOD and Middleton Stoney to the south at around 90 105m AOD. Bucknell to the east lies at around 95 105m AOD with the larger settlement are of Bicester to the south east at generally below 85m AOD.
- 7.4.33 The topographical context of the Application Site is characterised by the generally rolling nature of the land that falls from north west to south east, with variations provided by a series of smaller watercourses and secondary ridges. It contrasts with the more defined and pronounced landform of the River Cherwell valley beyond the former airfield to the west.

## Application Site - Landform

- 7.4.34 The topography of the Application Site is relatively simple and it lies predominantly within the gently rolling and falling land to the east of the former airfield. Principally, it comprises a small shallow valley landform with a minor watercourse situated relatively centrally to the Main Site and falling in a north to south direction. To either side (west and east) of this minor watercourse the ground rises gently.
- 7.4.35 The highest ground within the Main Site lies to the north and north west, adjoining the former airfield and the existing rail line boundary. Alongside these adjoining areas the land on the edge of the Main Site lies at up to around 125m AOD. Along the northern rail boundary the levels do vary with the land close to the B430/ rail bridge crossing at around 120m AOD. The shallow valley landform falls from the higher northern boundary gently towards the south, with the minor watercourse situated at around 110m AOD to the west of Ashgrove Farm and falling to below 105m AOD on the southern boundary of the Main Site.
- 7.4.36 Along the eastern side of the Main Site the land generally falls in a north to south direction along the B430, from around 120m to below 105m AOD. On the western side the boundary with the former airfield is relatively consistent at around 120 125m AOD, with the land gently rising to the north west through the airfield and falling to the south east within the Main Site. The southern portion of the Main Site includes land at typically 105 115m AOD.
- 7.4.37 The site of the Highway Works to the east of Ardley and north of Junction 10 includes land at typically 110 125m AOD yet including a series of embankments and other level changes associated with the major roads and Junction 10. The Middleton Stoney Relief road corridor to the south east of the Main Site crosses Gagle Brook and stretches across relatively lower lying yet gently rolling land at typically 95 105m



AOD. Gagle Brook lies at below 95m AOD where the proposed Middleton Stoney Relief Road corridor crosses it.

## **Application Site and Context**

#### Local Landscape Character

- 7.4.38 An assessment of landscape character of the Application Site and its immediate context has been carried out, providing a finer level of assessment than the published studies.
- 7.4.39 The Main Site is situated immediately to the south east of the Upper Heyford Former Airfield, south of the Chiltern rail line and west of the B430. The settlements of Ardley and Middleton Stoney lie beyond the Application Site respectively to the north and south of the Main Site, with the Highways Works involving components to the east of both villages in the Ardley Bypass and Middleton Stoney Relief Road respectively. Other features and uses within the context of the Application Site include the M40 motorway to the east, of the Main Site with Junction 10 of the motorway forming part of the north-eastern extent of the proposed highways works ; the Viridor Energy Recovery Facility (ERF) and associated quarry/ landfill restored landscape, to the east of the Main Site (beyond the B430) and active mineral workings also to the east; farmland and woodlands to the south and south west of the Main Site; a small number of scattered properties; and Middleton Park to the south.
- 7.4.40 In addition, there is ongoing major residential and mixed-use development within the site of the former airfield (the 'Heyford Park' development) to the west of the Main Site and other proposed and emerging residential development also within the airfield or alongside the Main Site immediately to the west.
- 7.4.41 The Main Site itself comprises predominantly arable farmland yet also Ashgrove Farm and associated cottages (Ashgrove Cottages) and other farm buildings and garden areas; a small covered reservoir; a waste processing facility; a stretch of unnamed minor road (linking the B430 westwards to Heyford Park; a series of generally small wooded areas and copses; and other mature hedgerows and scattered individual and hedgerow trees.
- 7.4.42 The Application Site and its immediate context is thus varied in terms of the mix of uses, characteristics and features and includes a number of large scale transport corridors and developments set alongside and within gently rolling farmland areas, with a reasonable proportion of woodlands and network of hedgerows. The Upper Heyford Former Airfield and the associated and emerging Heyford Park development form a dominant component of this local landscape character. The Viridor ERF forms a notable visual feature and reference to the east of the Main Site, with the M40 motorway and Junction 10 also forming major features within the local landscape.
- 7.4.43 Ardley and Middleton Stoney to the north and south of the Main Site occupy relatively enclosed landscape settings. Ardley lies to the north of the Main Site and rail corridor,



with the main settlement area situated beyond mature woodland and planting. Middleton Stoney to the south of the Main Site occupies a relatively lower lying position with the combination of landform variations and mature woodlands providing some visual containment and separation between the settlement area and its broader landscape setting. Middleton Park (a Registered Park and Garden) lies immediately to the west of the main settlement area and includes a mature landscape setting.

- 7.4.44 The landscape character of the Application Site itself is largely derived from the gently sloping and rolling arable farmland; the small wooded areas and mature trees; the Ashgrove Farm collection of buildings and structures and gardens; and the influence of the surrounding developments, woodlands and other features. The scale of the Application Site and its immediate context is medium with the former airfield, Viridor ERF and M40 motorway forming larger scale and more urbanising features.
- 7.4.45 Along the northern boundary to the Main Site lies the Chiltern Rail line. For the stretch of line alongside the Main Site, the rail line is situated in a cutting and views towards the rail line either from the south or north of this part of the line are limited. Road bridges cross the line to the north west (Somerton Road) and north east (B430) corners of the Main Site and a further bridge crossing of the line exists along the northern boundary of the Main Site. This provides field access only from the north of the line. Much of the rail cutting includes a mix of habitats, including mature trees, scrub and grassland areas.
- 7.4.46 On the western side of the Main Site, the former airfield and its associated former and emerging features and uses are evident, although much of the recent Heyford Park development and areas in the south and west of the former airfield are visually separated and not readily apparent from the Main Site. The former runway and bomb stores and other buildings and structures largely towards the east of the former airfield are visible from the site to varying degrees. Perimeter chain link fencing to the airfield extends around the boundary with the site, with some mature tree groups located within the former airfield close to this boundary.
- 7.4.47 A short lane (Chilgrove Drive) leading to a dead end also lies on the western edge of the Main Site, immediately south of the former airfield. This lane includes some mature trees and hedgerows to the roadside and the land falls gently to both the east and west of the lane. Mature woodland (The Heath) lies to the south of this lane and its junction with Camp Road. This woodland also borders the Main Site and extends southwards to the west of Camp Road and towards Middleton Park. The Main Site and its immediate surrounds in this south western area comprises a number of arable fields.
- 7.4.48 On the southern side of the Main Site, the land gently falls towards the small watercourse and generally to the south. Some small wooded areas and a short line of larger individual mature trees also lie within or in the immediate surrounds to this southern part of the Main Site. Manor Farm and Manor Farm Cottages lie on the lower slopes beyond the southern Main Site boundary. From this position the land continues to fall gently towards Middleton Stoney and the south east, with the small



watercourse passing beneath the B430 to confluence with Gagle Brook further to the east. The gently falling and undulating nature of this land immediately south of the site and the presence of some wooded areas and mature trees provides some visual enclosure to this area.

- 7.4.49 The site of the Middleton Stoney Relief Road stretches across this gently falling land to the east of the B430. This crosses existing farmland and Gagle Brook with mature trees and planting lining the brook for much of its length at this point. Dewars Farm lies to the south of this proposed road corridor, close to the east of the B430 and a small group of properties lie to the north east of the corridor at Bucknell Lodge.
- 7.4.50 On the eastern side of the Main Site, the B430 provides a clearly defined boundary to the site. To the west of this and within the Main Site the land comprises farmland with an underground reservoir (grass covered and extending to approximately 3m above ground level) and adjoining waste processing facility. The latter includes a small number of buildings.
- 7.4.51 At this point, the B430 includes a mature hedgerow and some other matures trees and planting along its western side and a belt of mature trees extending for much of the length of road adjoining the site on its eastern side. Beyond the tree belt to the east of the road and the Main Site the immediate landscape is dominated by the Viridor ERF, a restored quarry/ landfill area and an active quarry (Smiths). A household waste recycling facility lies further to the north along this eastern side of the B430. Gagle Brook also lies further to the east of the Main Site and falls from north to south. This watercourse is lined by mature woodland, trees and planting for much of its length between the rail line to the north and the B4030 to the south.
- 7.4.52 The central part of the Main Site itself includes Ashgrove Farm, comprising a large farmhouse and series of other buildings and structures set within an immediate landscape setting including a mature garden and other trees and planting. Adjoining this area is further existing trees, planting and other habitats situated along the minor watercourse on the lower lying land. The farmhouse and at least one of the other buildings has some heritage value as detailed within the Cultural Heritage Chapter of this ES. Other buildings and structures are of less value or more recent additions. Ashgrove Cottages are situated close to the B430 on the eastern edge of the Main Site at the entrance to the drive leading to the farm.
- 7.4.53 The Application Site area comprising the highway works to the east of Ardley and around Junction 10 is varied and comprises a combination of the existing motorway junction and connecting roads, farmland and woodland and tree belts. It also includes the Cherwell Services immediately to the east of this part of the Application Site. This is a generally interrupted local landscape, with a number of subdivided land parcels separated and dominated by the existing roads, junction and associated infrastructure.



## Landscape Value

- 7.4.54 In terms of "landscape value" it is appropriate to examine the role of the Application Site and its immediate context in terms of the range of local factors set out in LI TGN 02-21) and summarised in the methodology. It considers the landscape in terms of a range of factors as set out below. As a starting point, landscape designations have been considered.
- 7.4.55 <u>Landscape Designations</u>: The Application Site and its immediate landscape context are not subject to any national, local, or other landscape specific designations. It does not lie within a National Park or Area of Outstanding Natural Beauty (AONB) or at a more localised scale a Special Landscape Area (SLA) or equivalent.
- 7.4.56 Middleton Park to the south west of the Main Site (approximately 600 750m) is a registered Park and Garden (Grade II) and is thus of some heritage and landscape value and sensitivity. It includes mature parkland and wooded area and is relatively enclosed from its surrounding and the landscape to the north and north east.
- 7.4.57 A series of other environmental designations lies within the immediate surrounds and context of the Main Site. These are predominantly of a natural or cultural heritage basis (See below). Within the Application Site, these designations are limited to a Listed Building at Ashgrove Farm and a Site of Special Scientific Interest along the rail corridor on the northern edge of the Main Site.
- 7.4.58 <u>Natural Heritage:</u> The Ecological Assessment work undertaken to date for the Application Site indicates that it includes a mix of habitats, yet the Main Site is predominantly under arable use and of relatively lower interest in these terms, with small areas of semi-improved grassland, plantation woodland, scrub, mature trees and small watercourses. Sites and habitats of relatively greater interest do however exist largely within the immediate and wider context of the Application Site, including the rail cutting on the northern edge of the Main Site and within the former airfield to the west and the network of native hedgerows across the Main Site.
- 7.4.59 <u>Cultural Heritage:</u> The Heritage Assessment work undertaken to date for the Application Site indicates that much of the heritage interest lies outside the Application Site boundary, with a number of listed buildings and Conservation Areas situated at Ardley and at the former airfield and a Registered Park and Garden (Middleton Park) further removed from the Application Site to the south. A single listed building does exist at Ashgrove Farm. Many of these designated heritage assets are visually separated from the Application Site.
- 7.4.60 <u>Landscape Condition</u>: The condition and degree of intactness of the landscape varies.
- 7.4.61 The field pattern within the Application Site is generally intact although there has been some change over time. Field boundaries vary in terms of composition and condition, with a combination of predominantly hedgerows and some fenced boundaries.



Existing hedgerow boundaries do include some mature trees although overall number and proportion is not considered to be high.

- 7.4.62 Existing wooded areas within the Application Site are similarly variable in terms of age and condition, although these are predominantly in a reasonable condition. Ashgrove Farm and its associated buildings, garden and landscape are similarly considered to be intact and in a reasonable condition albeit that some of the older buildings and structures are in need of repair or have recently undergone some repairs. The surrounding garden and immediate landscape to the Farm is mature and also in a reasonable condition.
- 7.4.63 The immediate Application Site context includes some landscape parts that have changed notably or are undergoing change and others that have remained largely unchanged and intact. East of the B430 the immediate context includes the Viridor ERF and both active and restored quarry workings and landfill areas. These have inevitably undergone notably change yet the retained and restored landscape areas generally appear to be in a good or reasonable condition.
- 7.4.64 The Upper Heyford Former Airfield includes the recent and ongoing Heyford park mixed use development. Whilst this has entailed notable change to some parts of the airfield, largely in the south, much of the remaining former airfield landscape and features are still largely intact. The recent development area is considered to be generally in good condition with the retained and new landscape being actively managed.
- 7.4.65 The immediate context of the Main Site to the north and south includes largely a combination of farmland (to the south) and woodland (north and south) and other grassland and mixed habitats (largely within the rail cutting and Ardley SSSI (north). These areas are largely intact and in a reasonable condition.
- 7.4.66 Overall, the Landscape Condition of the existing Application Site and its immediate context is provisionally assessed to be Medium yet includes areas and elements of varying intactness and relatively higher (better) and lower (poorer) conditions.
- 7.4.67 <u>Associations:</u> No relevant associations between the landscape of the Application Site and any artists, writers or other people of interest, or with significant events in history have been identified.
- 7.4.68 The Upper Heyford Former Airfield immediately to the west of the Main Site does however include some historical associations as a Cold War Airbase and through its active role in WWII. This lies outside the Application Site and there is a clear boundary delineating the airfield.
- 7.4.69 <u>Distinctiveness</u>: The Application Site and its immediate context encompass a variety of landscape characteristics, uses and features and it lies at the boundary and transition of two main Landscape Character Types (as defined within the OWLS study namely; the *Farmland Plateau* and *Wooded Estatelands* Landscape Types).



- 7.4.70 The landscape of the Application Site and its immediate context is broadly representative of these Landscape Types yet does include some larger scale development and infrastructure influences that are not as readily apparent in other parts of these particular Landscape Types. Notably, the Application Site and its immediate context is not wholly representative of either one of the defined Landscape Types but rather displays some of the features, attributes, and characteristics of each.
- 7.4.71 This landscape context of the Application Site is varied in character although the Application Site itself is relatively simpler in terms of uses and features. The underlying topography is gently rolling with a fall generally towards the south east. It does not appear to include any distinctive or rare landscape features. The most positive landscape characteristics and features within the Application Site are the mature trees, wooded areas, some hedgerows and other habitats largely associated with the minor watercourse and parts of the Ashgrove Farm complex and its immediate surrounds.
- 7.4.72 Within the immediate Application Site context further mature woodland (including Ardley Wood to the north and The Heath and Birch Spinney to the west and south of the Main Site) is present and beyond this, Middleton Park and the former airfield contribute positively to the surrounding and wider landscape. The M40 motorway and Junction 10 impart active and detracting influences at the northern extent and beyond the Application Site to the east.
- 7.4.73 <u>Recreational Value:</u> The Application Site includes limited stretches of Public Rights of Way (PROW) and no other formal recreational uses and no open access or common land. The existing PROW within the Main Site are limited to bridleways that provide a link between the B430 in the north east corner of the Main Site and the unnamed road to the east of Camp Road. This route does not appear to be capable of being used by horses and is not easily accessible.
- 7.4.74 Within the immediate context of the Application Site including to the north of the Main Site are a series of PROW and other footpaths that provide good access in and around Ardley Wood and the southern edge of Ardley. These all lie north of the rail line. Other PROW exist within the immediate and wider context of the Application Site, including routes along Gagle Brook to the east and across the landscape to the south and south west of the Main Site. There is no public access within or around the eastern part of the airfield, bordering the west of the Main Site.
- 7.4.75 <u>Perceptual (Scenic)</u>: The Application Site lies within a varying landscape in terms of scenic quality. The existing mature woodland, trees and hedgerows both within and surrounding the Main Site and the connecting and overlapping nature of these in views of the landscape add positively to the general scenic quality. These are most apparent beyond the Main Site to the north and south west yet smaller wooded areas and mature trees also extend along the minor watercourse through the Main Site.
- 7.4.76 There are also some visual detractors, principally in the form of the M40 motorway to the north and east yet also to a relatively lesser extent and more immediate to the



Main Site in the form of the chain-link fenced surrounds to the former airfield. The Viridor ERF also forms a notable and recognisable feature in many views from within and around the Application Site.

- 7.4.77 Overall, the scenic quality of the Application Site and its immediate context is reasonable (or Medium), yet there are both positive and detracting elements within this landscape.
- 7.4.78 <u>Perceptual (Wildness and tranquillity):</u> There are no notable or obvious perceptual qualities to the Site or its immediate context and it is not a tranquil, remote or wild landscape. Large scale development and infrastructure uses and features exist both within the northern part of the Application Site and the immediate context of the Main Site.
- 7.4.79 <u>Functional aspects:</u> The Application Site itself includes a small watercourse and mature wooded areas and other habitats that do offer some limited functional contribution as a landscape corridor yet it does not perform any clearly identifiable or notable landscape function beyond this localised link.
- 7.4.80 Other green corridors and Green Infrastructure areas surrounding and in the context of the Application Site include the rail corridor and Ardley Wood to the north of the Main Site; the mature woodland stretching to Middleton Park to the south west; and the restored quarry/ landfill and Gagle Brook to the east. These offer a relatively greater contribution in GI terms.
- 7.4.81 Beyond these relatively localised GI elements and green corridors the Application Site and its immediate context does not have any strong physical or functional links with any surrounding landscapes. The Application Site and its immediate context also does not have a physical or functional link with an adjacent landscape designation or towards the appreciation of a designated landscape and its special qualities. Middleton Park occupies a mature and enclosed landscape setting with mature woodland and tree belts visually separating it from the landscape to the north.
- 7.4.82 The Application Site and its immediate context also does not perform a role in maintaining any settlement or development separation.
- 7.4.83 <u>Conclusion on Landscape Value:</u> In conclusion and having appraised all of the above factors, it is provisionally judged that the Application Site and its immediate context is of Medium landscape value. Inevitably, this includes landscape characteristics, features and attributes that are of relatively higher and lower value.

## Arboriculture

7.4.84 A comprehensive survey of trees and hedgerows across the Application Site has been undertaken in accordance with guidance contained within British Standard 5837 (2012) Trees in relation to design, demolition and construction - Recommendations. The survey has included those trees, hedgerows and woodlands which are present



either within the Application Site or within influencing distance so that an assessment of impacts arising from the proposals can be made and to inform decision making.

7.4.85 The draft Arboricultural Assessment is included at Appendix 7.2 and details the existing arboricultural resource on the Application Site.

## **Visual Baseline**

- 7.4.86 A visual appraisal has been undertaken for the Application Site and the Proposed Development. This has explored the nature of the existing visual amenity of the area and sought to establish the approximate visibility of the Application Site from surrounding locations and receptors. A series of Photo Viewpoints have been selected which support this baseline analysis.
- 7.4.87 Photo Viewpoints have been taken to illustrate a view from a specific vantage point, or to demonstrate a representative view for those receptors that are moving through the landscape, e.g. Public Rights of Way or Road users. The Photo Viewpoints may demonstrate varying degrees of visibility and include both short and long range views. Some have also been included to support the description and understanding of the existing character and features within the Application Site. The photographs were taken at different times during 2020 to 2022. Seasonal differences have been considered when considering the likely visual effects on surrounding receptors.
- 7.4.88 Further details of the existing views and the likely effects of the Proposed Development on these views and the visual receptors are included in the subsequent Assessment of Likely Effects section.

## Visual Receptors

- 7.4.89 The following visual receptors that may be affected by the proposed development have been provisionally identified:
  - Residents including principally those at the following locations;
    - o Ardley;
    - Middleton Stoney;
    - Potentially from limited properties at Heyford Park;
    - Potentially from limited properties at or around the edges of Bucknell to the east and Fritwell to the north; and
    - Scattered individual and farming properties principally to the east and south of the Application Site yet also potentially to the north and west;
  - Users of Public Rights of Way; including within the Application Site and principally to the north, east and south east of the Main Site;
  - Users/ visitors to Middleton Park
  - Users of surrounding roads including the B430, B4030, Camp Road, Somerton/ Ardley Road, Middleton Road and M40 motorway;
  - Users/ visitors to the Upper Heyford former airfield;



- Users/ visitors to a limited number of commercial/ industrial premises; including the Viridor ERF, the waste processing facility (within the Main Site); the household waste recycling facility on the B430; and active quarry (south of the ERF);
- Potentially other more distant and generally elevated receptor locations.
- 7.4.90 All of these visual receptors and any others subsequently identified will be further appraised by the ongoing impact assessment and design development process.

## Photo Viewpoints

7.4.91 A series of representative viewpoints have been prepared and are included at Figure7.6. The location of these viewpoints (Figure 7.5) has been discussed and provisionally agreed with Cherwell District Council.

#### Visual Appraisal

7.4.92 Drawing upon the provisionally identified visual receptors outlined above, the following provides an outline of the visual appraisal to date.

## Ardley

7.4.93 The settlement of Ardley a occupies a position that is relatively close to the north yet visually separated from the Main Site by the nature of the gently rolling and falling landform and the presence of notable intervening mature woodland and trees. Properties within the settlement area including those on its southern side do not have views of the Main Site. Some properties on its eastern side including some recently developed houses do however have views eastwards in the general direction of the M40 and proposed Ardley Bypass.

## Middleton Stoney

- 7.4.94 Middleton Stoney lies directly to the south of the Main Site. The majority of properties within this settlement do not have views northwards in the direction of the Main Site. However, there are some properties on the northern side of the settlement and on the B4030 on its north western edge that do have some views northwards. Within the available views from the settlement the rolling landform and presence of mature wooded areas and hedgerows and trees generally overlap to interrupt the extent of some views. Limited parts of the southern area of the Main Site and mature woodland within and surrounding this part of the Main Site are however visible from some positions, albeit that the Main Site is substantially screened from most properties and positions, even on its northern edge.
- 7.4.95 A relatively small number of properties on the north eastern and eastern edge of the settlement have potential views towards the site of the Middleton Stoney Relief Road.



## Heyford Park (mixed use and residential development area)

- 7.4.96 This existing and emerging mixed use and residential development area is largely visually separated from the Main Site by a combination of existing trees and planting and other existing buildings and structures (on the eastern side of the current development area) and the gently rolling nature of the underlying landform.
- 7.4.97 There are no discernible views towards the Main Site from this development, although distant views across the airfield to the north west corner of the Main Site may be possible.

## Other Settlements and Properties

- 7.4.98 From north of the Main Site, Fritwell is largely screened from it by the nature of the landform and presence of mature intervening trees and hedgerows including those close to the edge of the settlement. Glimpsed and distant views may however be potentially possible from very limited properties or positions on the southern edge towards the north west corner of the Main Site or towards the site areas around Junction 10 to the south east.
- 7.4.99 Bucknell lies to the east of the Main Site and also to the east of the M40 motorway. This small settlement sits relatively low in the immediate landscape with limited opportunities for distant views towards the west and the general direction of the Main Site. The Main Site is screened in this direction from Bucknell by the intervening landform both east and west of the motorway, including the restored landfill area and mature trees and trees belts (including along the eastern side of the B430).
- 7.4.100 Other more scattered individual properties have varying views towards the Application Site. These include a relatively small number of properties surrounding the Application Site areas, including Manor Farm, Manor Farm cottages and Dewars Farm to the south and south east of the Main Site.
- 7.4.101 Views towards both the Main and Application Site areas from other settlements and the wider landscape are considered to be very limited yet this will be further appraised as the impact assessment and scheme design progresses.

## Public Rights of Way (PROW)

- 7.4.102 Views from PROW towards the Main Site vary yet overall are not considered to be extensive. The bridleway that crosses the Main Site west of the B430 does not appear to be regularly used although it does provide clear views across the majority of area.
- 7.4.103 A series of PROW and other permissive or informal footpaths and routes extend in around Ardley wood to the north of the Main Site. Many of these routes extend through or close to mature woodland and this is effective in screening and limiting views towards the Main Site and longer ranging views towards the south. Existing woodland, trees and scrub within and along the existing rail cutting on the northern boundary of the Main Site further adds to the visual screening to the south. At points close to the edge of the existing rail cutting views are possible along and across the



cutting from some of the informal footpath routes. However, even from these positions the Main Site is not readily visible due to the existing trees and planting on the southern side of the cutting and the general fall of the land towards the south.

- 7.4.104 To the east and north east of Ardley are a further number of PROW that generally extend towards the east and the M40 motorway and Junction 10. Views from these routes will be possible principally towards the site areas for the highway related works. Further PROW to the east of the M40 have views westwards and south westwards in the general direction of the Main Site, albeit that the M40 and the Viridor ERF are readily evident in these views.
- 7.4.105 A PROW (bridleway) along Gagle Brook sits generally at a low level and within and alongside mature trees and other planting limiting any potential for views towards the Main Site. Views from the PROW (footpaths) alongside the watercourse and to the north of the watercourse further south towards Middleton Stoney are possible towards the site area for the proposed highway works (Middleton Stoney Relief Road), principally at the crossing of the watercourse.
- 7.4.106 Other views towards the Application Site from PROW to the south west, west and north west are limited given the presence of existing woodland, the former airfield and the general presence of relatively fewer PROW in these directions.

## Middleton Park

7.4.107 Residents, visitors and users of the Park have very limited opportunity for views northwards, in the general direction of the Application Site. Mature trees and tree belts enclose the north eastern part of the parkland alongside the B4030 and thus any intervisibility between the park and the landscape to the north is very limited. Any potential for views from the edge of the Park towards the Main Site are also further limited by the intervening wooded copses, trees and hedgerows that lie to the south and south west of the Main Site.

# Road Users

- 7.4.108 Views towards the Application Site are possible from various roads in and around the Application Site. The clearest views from roads towards the Main Site are from the B430 and the minor road linking west east across from the B430 to Camp Road. Other views towards the Main Site are also possible to varying degrees from Camp Road (at the junction with Chilgrove Drive on its western edge), the B4030, Somerton Road and Ardley Road.
- 7.4.109 The Site area for the highway works is visible from further roads generally to the north east of the Main Site including from the M40, A43 and B4100.

# Upper Heyford former airfield

7.4.110 From the eastern and northern parts of the former airfield, including from the open runway and fringe areas, views are possible towards the Main Site. Within many of these open views, the Main Site generally falls away from the airfield boundary and



sits relatively lower to the east, so the visible extent and elements of the Main Site are limited to some extent. The nature of the views towards the Main Site does vary depending on the location within the former airfield with no views possible from some parts particularly to the west. The airfield generally sits relatively higher than the Main Site.

7.4.111 Views from the Heyford Park development area within the southern part of the former airfield are appraised above.

## Other Visual Receptors

7.4.112 Views towards the Application Site will be possible from a number of other receptors including users of the waste processing and recycling and ERF facilities. These and other visual receptors identified through the impact assessment process will be appraised with regard to potential visual impacts arising from the proposed development.

## **Future Baseline**

- 7.4.113 The future landscape and visual baseline conditions of the Application Site itself are unlikely to change in the absence of the proposed development.
- 7.4.114 The context of the Application Site does include some emerging and committed developments including major urban extension and mixed use developments around Bicester, including on its north western edge and other developments close to the west of the Main Site at Heyford Park. These will increase the presence of built development within both the immediate and wider context of the Application Site.

# 7.5 ASSESSMENT OF LIKELY EFFECTS

7.5.1 The potential effects of the Proposed Development will be assessed in accordance with the Guidelines for Landscape and Visual Impact Assessment (3rd Edition; April 2013) (GLVIA3). The Proposed Development has the potential to result in impacts upon the landscape and visual receptors detailed in the preceding section and potentially further receptors that may be identified during the ongoing design and assessment work stages.

# **Construction Effects**

## Construction Landscape Effects

- 7.5.2 The construction stage of the Proposed Development could generate some potential significant landscape and visual effects of both a temporary and permanent nature. The potential effects are likely to include:
  - Effects upon the landscape character and features of the Application Site and its context.



At an Application Site wide scale, the character of the landscape will progressively and markedly change from one of a predominantly farmland to a character dominated by new large scale employment uses, new highways and associated infrastructure and landscape areas.

- Effects arising from the direct loss of landscape features, including:
  - o existing wooded copses, groups of trees and individual trees;
  - existing hedgerows;
  - existing other habitats.

## Construction Visual Effects

- 7.5.3 Initially, visual effects are likely to arise from the operation and formation of the earthworks, including site clearance activities. Subsequently, the construction of the highways, buildings, drainage and other infrastructure and landscape proposals will have visual impacts to varying extents, largely subject to the proximity and availability of views towards the Proposed Development.
- 7.5.4 The construction stage visual effects will vary throughout the course of the construction period with some receptors experiencing greater visual impact over a longer period of construction and others more limited impacts. The phasing and working arrangements will also influence how and where these likely visual effects vary during this period.
- 7.5.5 In general, those visual receptors with the clearest and closest views towards parts of the Application Site are however likely to experience the greatest visual effects at the height of construction activity.

# **Operational Effects**

## **Operational Landscape Effects**

- 7.5.6 The operational stage of the Proposed Development could generate some potential significant landscape and visual effects. The potential effects are likely to include:
  - Effects upon the landscape character and features of the Application Site and its context.

At an Application Site wide scale, the character of the landscape will markedly change from one of a predominantly farmland to a character dominated by new large scale employment uses, new highways and associated infrastructure and landscape areas.

- Effects arising from the direct loss of landscape features, including:
  - o existing wooded copses, groups of trees and individual trees;
  - existing hedgerows;
  - existing other habitats.



## **Operational Visual Effects**

- 7.5.7 The completed and operational development is likely to result in varying visual effects upon surrounding visual receptors. The most notable visual effects are likely to arise for those receptors with the clearest and closest views towards the proposed built development and highways. This is likely to include some residents, users of some stretches of PROW and users of some roads.
- 7.5.8 The Proposed Development is not however likely to be visible from the majority of properties and locations within the surrounding settlements at Ardley, Middleton Stoney and Bucknell or from the majority of the existing and emerging Heyford Park development. There is however likely to be some views towards parts of the Proposed Development from some properties and locations at Ardley, Middleton Stoney and Heyford Park, although where present these are also likely to be restricted to varying extents. From the limited number of other farming and scattered properties in relatively close proximity to the Application Site, there are also likely to be varying views towards the completed development, with the proposed perimeter mounding and landscape proposals mitigating some of these potential effects.
- 7.5.9 Views towards the completed and operational development will similarly vary for users of the surrounding PROW and roads. The most notable visual effects are similarly likely to arise for those users with the closest and clearest views and this could potentially include users of stretches of the B430 and B4030 and users of the PROW situated within the Main Site. Inevitably, users of the latter are likely to experience the greatest visual change.
- 7.5.10 There are likely to be further views towards the Proposed Development from within the context of the Application Site and these will also be further considered and appraised as the assessment and design progresses.
- 7.5.11 The design principles and 'parameters' for the Proposed Development, particularly in relation to the outer landscape areas; mitigation mounding; and building levels and heights have had particular regard to the potential visual effects upon surrounding receptors.

# 7.6 MITIGATION AND RESIDUAL EFFECTS

## Introduction

- 7.6.1 The development proposals are described in draft Chapter 2 of this ES (and will ultimately be more fully described in a Design and Access Statement and other information to accompany the DCO application).
- 7.6.2 The existing landscape character and features and the visual amenity of the Application Site have been carefully considered by the planning and design process and have been important factors in informing and shaping the resultant scheme and



development parameters to date. This approach has entailed close collaboration between landscape, engineering, ecological consultants and other professionals. This iterative assessment and design process and close collaboration will continue as the scheme design is further 'tested' and refined by the environmental impact assessment process

7.6.3 The resultant landscape components of the scheme are an important and integral part of the proposals and act as 'embedded' mitigation, designed positively into the overall scheme.

## Landscape Design and Green Infrastructure (GI) Objectives

- 7.6.4 The key objectives of the landscape and GI proposals for the scheme are to:
  - Assist in assimilating the built development proposals and in establishing an appropriately robust and cohesive landscape setting within which the new built development and infrastructure proposals will be sited;
  - Mitigate and minimise as far as practicable the potential landscape and visual effects arising from the Proposed Development;
  - Secure and maximise biodiversity interest, through conservation, enhancement and creation of habitats and green spaces;
  - Contribute positively towards the landscape and GI strategy objectives of the planning policies, published landscape character and GI studies and towards more localised GI opportunities at a site wide scale; and
  - Achieve an overall development and landscape solution that recognises the character and features of both the local and wider landscape and draws upon these in the outline and subsequent detailed proposals.

## Landscape and Green Infrastructure (GI) Mitigation and Proposals

- 7.6.5 The landscape and GI proposals for the scheme are depicted on the Illustrative Masterplan and accompanying Illustrative Landscape Cross Sections. The Parameters Plan also fixes and defines the location and disposition of the Landscape and GI areas, strategic mitigation mounding and other features and their relationship with the proposed built development on the Main Site. In summary, these proposals include:
  - The provision of approximately 132 hectares (ha) of land dedicated to landscape, GI, and habitat related proposals representing approximately a third 44% of the total Main Site area.
  - Conserved mature wooded areas, trees and habitats, particularly along the central watercourse and around the perimeter of the Main Site. This conserved existing planting and habitats will be appropriately and actively managed for arboricultural and biodiversity benefits.



- A mix of new native woodland, trees, hedgerows, scrub and open calcareous and conservation grassland habitats, extending around the built development zones. This will encompass broad landscape swathes to all sides of the Main Site and alongside all new highways and junction areas.
- Perimeter strategic mounding, also extending around all sides and aspects of the Main Site. In conjunction with the conserved trees and planting and new woodland, scrub and other planting, this proposed mounding and planting will provide mitigation and visual screening to views from all directions around the Main Site.
- Sustainable drainage ponds/ swales and other measures sited in the broad landscape areas and also within the main development areas. In addition to satisfying drainage requirements, these will be designed for landscape, amenity and biodiversity benefits, with other surrounding habitats including open conservation grassland and scrub.
- New public access routes providing a variety of multi-user routes and opportunities within and around the Main Site. This will include circuitous loops around the perimeter landscape and GI areas, and connections to and extensions of existing routes and PROW within the immediate context of the Application Site.
- 7.6.6 In devising the landscape and GI proposals to date there has been careful analysis of the development proposals and close collaboration with other environmental and technical professionals. This has sought to minimise potential adverse environmental effects and maximise opportunities for landscape and GI within the Application Site. It has also sought to ensure that the landscape strategy proposals are both appropriate in the short and longer terms. Careful attention has been paid to the earthworks strategy to date to ensure that an integrated solution is delivered that considers and addresses the relevant landscape and visual issues and mitigates any potential adverse effects as far as practicable.

# Landscape Management

7.6.7 All of the landscape, GI and habitat areas will be managed and maintained in the long term. It is currently anticipated that this will be achieved through the implementation of a comprehensive Landscape and Ecological Management Plan (LEMP) to be determined alongside other relevant site management objectives and requirements. The subsequent detailed design and management works for the landscape and GI areas will be advanced in close collaboration with the relevant authorities and other technical and environmental professionals.

# **Residual Effects**

7.6.8 The assessment of residual effects will consider the effects after the incorporation of the mitigation measures. In the context of the landscape and visual impact assessment, primary mitigation measures and considerations will be incorporated as an integral (or 'embedded') part of the design and layout of the proposed



development. To date, this has included attention to the siting, layout and heights of the proposed buildings and consideration of the earthworks and ground modelling proposals.

- 7.6.9 All of these aspects and features will continue to be considered in the design of the proposed development and the development parameters and will therefore be assessed as part of the construction and operational stages.
- 7.6.10 Consideration of the likely residual effects will appraise the proposed development 15 years after completion and will consider the growth and management of the proposed and conserved planting over this time.

# 7.7 CUMULATIVE EFFECTS

- 7.7.1 The cumulative effects assessment will consider the combined effects of the proposed development along with the 'other development(s)' on landscape and visual receptors.
- 7.7.2 For the purposes of the landscape and visual cumulative effects assessment, the following definitions reflecting GLVIA3 will apply:
  - Cumulative landscape effects may arise from adding new types of change or from increasing or extending the effects of the main project. The concern is with the accumulation of effects upon landscape character and the components that contribute to it. Cumulative landscape effects are likely to include effects: on the fabric of the landscape; on the aesthetic aspects of the landscape; and, on the overall character of the landscape.
  - Cumulative visual effects are the effects on views and visual amenity enjoyed by people, which may result either from adding the effects of the project being assessed to the effects of the other projects on the baseline conditions or from their combined effect. This may result from changes in the content and character of the views experienced in particular places.
- 7.7.3 The study area for the assessment of cumulative effects will comprise the Zone of Theoretical Visibility (ZTV) of the proposed development plus any predicted overlapping ZTV for the other relevant identified projects. This will be determined through desk top review of relevant plans and information included as part of the other development projects and/or from the review and use of existing baseline visual studies and fieldwork.
- 7.7.4 The potential relevant cumulative schemes will be agreed with the Local Planning Authority.



# 7.8 SUMMARY AND CONCLUSIONS

7.8.1 This section will be completed in draft for the Stage 2 consultation process following preparation of the landscape and visual assessment of the Proposed Development.